



ILLUSTRATION 2.3

The consolidating steel industry

Five forces analysis helps understand the changing attractiveness of an industry.

For a long time, the steel industry was seen as a static and unprofitable one. Producers were nationally-based, often state-owned and frequently unprofitable – the early 2000s saw 50 independent steel producers going into bankruptcy in the United States alone. But recent years have seen a turnaround. During 2006, Mittal Steel paid \$35bn (~€24.5bn) to buy European steel giant Arcelor, creating the world's largest steel company. The following year, Indian conglomerate Tata bought Anglo-Dutch steel company Corus for \$13bn. These high prices indicated considerable confidence in the prospects of a better industry structure.

New entrants

In the last two decades, two powerful groups have entered world steel markets. First, after a period of privatisation and reorganisation, Russia had become the world's second largest steel exporting country (behind Japan) in 2009, led by giants such as Severstal and Evraz. China too had become a major force. Between the early 1990s and 2009, Chinese producers have increased their capacity six times. Although Chinese share of world capacity reached over 40% in 2009, most of this was directed at the domestic market. China was the world's fourth largest steel exporter in 2009.

Substitutes

Steel is a nineteenth century technology, increasingly substituted for by other materials such as aluminium in cars, plastics and aluminium in packaging and ceramics and composites in many high-tech applications. Steel's own technological advances sometimes work to reduce need: thus steel cans have become about one third thinner over the last few decades.

Buyer power

The major buyers of steel are the global car manufacturers. Car manufacturers are sophisticated users, often leading in the technological development of their materials. In North America at least, the decline of the

once dominant 'Big Three' – General Motors, Ford and Chrysler – has meant many new domestic buyers, with companies such as Toyota, Nissan, Honda and BMW establishing local production plants. Another important user of steel is the metal packaging industry. Leading can producers such as Crown Holdings, which makes one third of all food cans produced in North America and Europe, buy in large volumes, coordinating purchases around the world.

Supplier power

The key raw material for steel producers is iron ore. The big three ore producers – Vale, Rio Tinto and BHP Billiton – control about 70% of the market for internationally traded ore. Iron ore prices had multiplied four times between 2005 and 2008, and, despite the recession, were still twice 2005's level in 2010.

Competitive rivalry

The industry has traditionally been very fragmented: in 2000, the world's top 5 producers accounted for only 14% of production. Companies such as Nucor in the US, Thyssen-Krupp in Germany as well as Mittal and Tata responded by buying up weaker players internationally. By 2009, the top 5 producers accounted for 20% of world production. New steel giant ArcelorMittal alone accounted for about 10% of world production, with one fifth of the European Union market. None the less, despite a cyclical peak in 2008 and a slump in 2009, the world steel price was basically the same in 2010 as in 2005.

Questions

- 1 In recent years, which of the five forces has become more positive for steel producers, which less so?
- 2 Explain the acquisition strategies of players such as Mittal, Tata and Nucor.
- 3 In the future, what might change to make the steel industry less attractive or more attractive?